The arguments made have for reasons of exposition assumed that the cost of termination of a single call on the wireless networks is roughly equal to the cost of terminating a single call on the wireline networks. That simplification may not correspond to the empirical realities. But even if that is the case, the cost of termination would have to be nearly six times greater on the wireless networks than on the wireline networks for the overall costs of termination to be balanced between the two systems. It is not likely that this condition holds today, or that it will hold in the future. Accordingly, on the empirical issues, the burden of proof should be squarely on the CMRS carriers to demonstrate such cost differentials before a bill and keep system is put into place. To date, no such proof has been advanced.

iiii. Administrative costs and incentive effects. The bill and keep proposal has been justified on the ground that its built-in administrative ease reduces the administrative costs (excluding those of running this and similar proceedings) to zero. But no matter what system of billing is used, some costs will have to be incurred. In this context, the transactional savings of bill and keep are relatively small. All phone calls must be routinely monitored and billed to customers, so some record keeping is required no matter what the outcome of this FCC rulemaking. The incremental billing costs between carriers are small, because they already stand in direct relationships with each other and can easily calculate, as they have done for many years, any transfer payment between them under the current legal regime. Indeed, if it should turn out that bill and keep provided a cheap and reliable system of settling accounts, then there is every reason for the parties to adopt it voluntarily, as its use will make them better off. There is accordingly, no reason to mandate

a system that the parties would choose to adopt voluntarily when it advanced their own economic interests.

It follows therefore that the takings analysis should not be driven by what is a distinctly second order issue. To see the point, assume that for each $.50 phone call, each carrier incurred a 1 percent billing charge, which, divided, equally yields one-half cent per call per carrier. Since the total costs of running the system have moved up from $.40 to $.41 per call, the profit (on the assumption that prices do not otherwise shift) is reduced from $.10 to $09. Under the Commission's view, the introduction of that additional penny justifies a transformation in the division of the revenues whereby a party who was previously guaranteed $.20 per transaction is all of a sudden shut out, all for half a cent. It is passing strange that a cost increase of $.01 should result in a wealth shift of $.20 per transaction. The right rule in this case is to insist that each party now receive a minimum of $.205 per transaction to cover costs, with a resulting $.01 reduction in surplus.

To see why this conclusion is correct, suppose that the government passed a law stipulating that two trading companies had to square their accounts under a bill and keep regime. Assume further that one company purchased $85 in goods from the second, which purchased $15 in goods from the first. The introduction of a $1 service expense would be regarded as an inadequate justification for wrecking the traditional terms and conditions of exchange in that market, and the scheme would surely be struck down as a taking under the present law. So long as money is property, the entire device is nothing more than an order that one company pay $70 to another. The bill and keep system should not be afforded any higher level of respect in the context of a communications network, where the distinctive features of the

common carrier system have all been taken into account by the statutory duties of interconnection already in place.

Nor is it possible to justify the bill and keep proposal by saying that this small reduction in administrative costs translates into an improvement in overall efficiency. The question of efficiency requires the minimization of the sum of administrative costs and bad negative incentive effects, not just the first alone. Yet unfortunately, a bill and keep rule would have poor allocative and incentive effects, both in the short and the long term. As the statements of Professor Hausman and Dr. Crandall both demonstrate, the bill and keep rule creates large externalities that preclude low social cost solutions to network connection problems. "By relying on market-based incentives and prices, and by replicating them, where necessary, our policies have sought to ensure the availability to consumers of goods and services at the lowest possible cost." (NPRM at 4). Yet that principle has not been followed in the proposed implementation of this rule, since no competitive market would ever attach a zero price to a costly service. See Hausman Statement, at page 3: "The Commission's proposal does not take account of the economic costs, but the proposal instead creates an incentive for the new CMRS entrant to minimize its cost while taking advantage of the existing networks and not paying for usage." Crandall Statement at page 8: "There are three related adverse incentive effects of instituting a policy of bill-and-keep: (1) it encourages competitors to seek out customers with a large share of originating traffic and to avoid customers with a large share of terminating traffic; (2) it subsidizes one technology at the expense of other, potentially more efficient, technologies; and (3) it creates a disincentive to invest in switching capacity to terminate calls."

Once again a simple numerical example illustrates the dangers that must be kept at bay. Under the bill and keep proposal, an originating carrier has the incentive to initiate all calls whose cost to it is below $.50. Only when the costs reach that number will that carrier find it uneconomical to continue with business. The choice between taking and rejecting new business, however, does not take into account the costs that are born by the terminating carrier, to whom no compensation is owing. If those costs were taken into account, then the originating carrier (we must now drop the original simplifying assumption of uniformity) would cease to accept business that cost it more than $.30 per call to complete, given its obligation to compensate the terminating carrier $.20. The level of services demanded at these two prices is quite different. Assume, for the sake of argument, that a price reduction of 50 percent generates double the level of calls. On any reasonable set of empirical assumptions, the proposed bill and keep rule creates allocative distortions that far outweigh any administrative savings.

Suppose, for example, that the originating carrier will take on 100 calls under a rule that requires reimbursement for costs. Given the assumptions that are made above, the set of transactions yields a positive social gain, for its costs of $40 are fully covered, and the only dispute is directed to the division of the surplus. But the situation changes radically under bill and keep. Now 200 calls are generated. As these calls are more expensive to produce, the costs to the originating producer of the second hundred calls rise, say to the level of $40. The originating firm still makes a profit on the transaction because its total revenues of $100 exceed its own cost of $60 ($20 + $40). But the transaction as a whole generates a social loss because the decision of the originating firm does not take into account the expenditures of the

terminating carrier on the calls. If its costs parallel those of the originating company, then the costs in question double to $120, while the total revenue generated remains at $100. The net social loss is $20, but the originating firm has no incentive to take it into account because the true economic costs are shifted to another firm. The $20 social losses would in fact dwarf the $1 in social losses needed to implement a system of reciprocal compensation that would be sufficient to obviate the problem

The force of this point is not reduced by pointing to the differences between the marginal cost of a single phone call and the marginal costs of expanding the size of the system to take into account the increases in CMRS/LEC traffic. It may be that the marginal cost of many individual calls is low, but so long as the size of the system at some point must be expanded to handle the increased volume then the cost of that expansion must be amortized over the many additional phone calls it serves. The usual regulatory prescription of Ramsey pricing (see Crandall Statement, at pages 4-5) seeks to impose the greatest costs on those services that have the least elasticity of demand (and which cannot therefore shift to other technologies). For these purposes we do not have to decide what portion of these basic costs should be assigned to the receipt of CMRS calls. It is only necessary to point out that terminating calls, under <u>any</u> set of assumptions are far greater than 0, so much so that 0 should be regarded perhaps as the one cost estimation most <u>certain</u> to be wrong.

The bill and keep approach thus forces the LECs to make uneconomical expansions of capacity without even providing them the revenues to cover their long term incremental costs of running the system. A fortiori, it follows that the formula does not allow for any contribution to the undistributed and

common costs, which must be necessarily incurred in setting up the overall system. The bottom line of the analysis is therefore that the bill and keep NPRM does not provide the LECs with any let alone a sufficient, rate of return to attract and keep capital for this set of its business activities.

II. THE EXISTING CASE LAW REQUIRES THE CONSTITUTIONAL INVALIDATION OF BILL AND KEEP. No matter how sound the analytical and economic case against the proposed bill and keep regime, the proponents of the current program have argued that it is consistent with the current constitutional framework that yields broad discretion to the Commission in the setting of rate orders. This issue has been argued in two ways. The first of their arguments rests on an incorrect view of the rate of return formula under Hope Natural Gas. The second argument rests on a similar misapprehension of the use of the investment-backed expectations theory of Penn Central.

A. The Bill and Keep Formula is Inconsistent with the Bottom Line Formula of Hope Natural Gas.

The watershed case on regulatory takings for public utilities is Federal Power Commission v. Hope Natural Gas, 320 U.S. 591, 602 (1944), which is known for its endorsement of the so-called bottom-up approach to rate of return regulation:

> It is not theory but impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end. The fact that the method employed to reach that result may contain infirmities is not then important. (Emphasis added.)

In order to place this key passage in context it is important to outline briefly the underlying dispute. Under the 1938 Natural Gas Act, the Federal Power Commission was given the authority to set the rates for natural gas that was sold in interstate commerce, namely to five customers located in Ohio and Pennsylvania. Hope arose when the regulated utility challenged the rate proceeding on the ground that it did not give it a just and reasonable rate of return on its assets. The rate order in question involved rates for all the interstate output of Hope. In so doing, the Commission allowed Hope only to include its "legitimate actual costs" which it defined as the original costs (incurred prior to the passage of the statute) less depreciation until the period when the Act took effect. The use of the lower number reduced, as a first approximation, the rate base from around $66 million to a figure just in excess of half that number.

Hope challenged the rate order on the ground that original cost less depreciation did not provide the proper figure for a rate base calculation. Instead Hope claimed that the appropriate measure was the fair current value of the goods and services, under Smyth v. Ames, 169 U.S. 466 (1898), which required the ratemaker to set the rate base equal to the "fair value" of the property. As Justice Rehnquist noted in Duquesne Light, 488 U.S. 299, 308-310 (1989), there is no easy way to choose between these two alternative rate bases. The "fair value" limitation of Smyth is more difficult to apply, but has superior incentive effects: the regulated firm gets no credit for wasted expenditures. The cost basis (less depreciation) is easier to use but has less desirable incentive effects. Hope essentially allowed the ratemaker to choose methods. The implicit assumption behind the decision was that various ratemaking errors would in all likelihood cancel each other out, such that the

gains in simplification would more than compensate for any loss in precision.

I have already noted my reservations over the extent to which the framework of rate of return regulation that governs Hope is applicable to the current controversy of the bill and keep proposal. But assuming its applicability, I want to draw special attention to two underscored limitations in the quoted passage. The first point is that the rate of return requirement attaches not to all the activities of the regulated industry, but only to those matters that are the subject of the particular rate order. The second is that if, but only if, the bottom line rate is acceptable for the transaction as a whole, then, but only then, are the infirmities of the rate order unimportant.

The adoption of this particular approach has direct relevance to this case. The sole subject of the present proposed rate order is the interconnection between the CMRS providers and LECs. As in Hope, certain portions of the total invested capital of the LECs are subject to regulation not through the Commission, but through the state regulatory authorities who have full capacity to adopt their own rules (on such matters as depreciation) in making their calculation. See Louisiana Public Service Commission v. FCC, 476 U.S. 355 (1986).

This division of authority has direct implications for the case at hand. The bottom line requirement for these interconnect transactions demands that a LEC receive a just and reasonable rate of return for its investment in this aspect of its business. The mere fact that it gets a windfall on those CMRS-LEC interconnections that it initiates does not assure that its bottom line is secured, given that its total capital is wiped out with respect to the

transactions that are originated by the CMRS provider. Since the bottom line within the rate order does not reach any suitable rate of return, it is not important to unpack the process used to reach that bottom line. (Once the bottom line is secured, then the internal pattern of calculations is ignored.) The errors here by definition sum to an inadequate rate of return for the subject matter of this rate order. The utter failure of the rule to take into account the costs of terminating calls can be assigned as a defect that rises to constitutional proportions.

In dealing with this question, it is important to note that the just compensation required under the constitution must come from the charges levied in connection with the transactions that were comprehended inside the scope of the rate order. Just that condition was satisfied in Hope where the firm's full interstate output was subject to a single rate order. It was likewise satisfied in Duquesne Light where the rate of return for the firm on its invested capital remained at around 13 percent even when the disputed nuclear power plant was removed from the rate base after approval for its construction had been given. See 488 U.S at 310-311. Yet in this rate order no adjustment has been made elsewhere in the rate structure to offset the unambiguous losses that the bill and keep rule generates. No simple declaration that all is well substitutes for the explicit rate order determination required under Hope.

The clear implication of both Hope and Duquesne Light is that the regulated party did not have to count on the vague promise that the losses brought on by the rate order would be compensated for somewhere else down the line. Here the protection that is afforded by requiring the internal integrity of each distinct rate order procedure cannot be understated. So long

as all the items in question are in play at the same time, the regulator knows that if the pants pinch in one place, then some slack must be cut in another. No matter what the source of give and take, all items can be reckoned at the same time, so that items of loss will not be left adrift without compensation. The errors will be random and cancel out. They will not be subject to systematic bias.

This balancing of the books in individual rate making proceedings is of great importance in this context. If other rates, for example, are set under a rate cap price system or are subject to competitive pressures, the losses under the bill and keep order will not be offset by an increase in rates elsewhere. Alternatively, the rate making authority may have either the obligation or the right to introduce various cross-subsidies over its customer base—an outcome that certainly is contemplated under the Federal Communications Act, with its provisions for subsidies to rural and disabled customers. Hope legitimates these cross-subsidies by allowing the Commission to recoup subsidized rates to one portion of the customer base by charging supracompetitive rates to another portion of that base. Any resource distortions under this procedure, and the social justifications for them, can both be taken into account by the Commission. The regulated firm, which did not authorize the subsidies, is not to be victimized by them. Its rate of return, as measured by the bottom line is constant regardless of how the individual components of the rate base are arrayed.

Once, however, any individual rate hearing is allowed to terminate at a loss, then this sensible regulatory accommodation is at an end. In the first rate order, the Commission could order the regulated firm to operate at an inadequate rate of return, or even at an actual loss. But there would be no

grounds on which to challenge that order because the Commission could always claim that compensation is forthcoming in the future, in some other rate hearing. But there is no obligation to say what rate hearing and to what extent. The ostensible compensation is left hidden in the clouds, dependent on proceedings that may never take place or which will be preoccupied by other more pressing issues that make it easy to overlook the need to tie up loose ends from earlier transactions. It is therefore all too tempting to announce in the second case, that the subsidy will be carried over to the third, and then perhaps to the fourth. As is all too often the case with Congressional budget balancing, the deficits to the firm are in the "in" years, and the compensating gains to the regulated firm are in the "out" years—"out" years that never quite come in from the cold.

These dangers are present in this individual case. This proposed rate order is by its own terms "interim." One reason is that no one is quite sure what the structure of the communications industry will be in five years, once the various communications companies start to invade each other's territories. It is quite possible that this rate order, and tens of similar rate orders, will be all rendered obsolete by the rapid changes in technology and industry structure that promise to be the only constant features of the future environment. Even if the Commission wanted to provide some compensation in the "out" years, there is no reason to believe that it could. For even if it were prepared to authorize supracompetitive rates, there is no reason to believe that consumers would ever be prepared to pay them in the ever more competitive markets that will emerge. So unless the accounts balance today, they will just not balance at all.

The problem is of special importance under the divided administrative structure for telecommunications regulation. A huge portion of the LEC business is regulated by state commissions, which have their own programs of subsidies for residential users. Just as the Commission cannot leave loose ends under its rate order for its own future business, so it cannot assume that some possible adjustments in the rates at the state level will compensate for the losses in question. There is no evidence that any state has, or would, include the total allocated costs for these transactions in their state rate bases. Nor is there any way in which that could be done for those states that operate under a rate cap price procedure. Notwithstanding the wide variation in the way in which state and local governments calibrate their rates, there is no reason to believe that any of them have taken, or will take, into account the substantial losses that will arise if the Commission orders the implementation of the bill and keep system. The revenues that are awarded to the LECs are compensation for the services rendered pursuant to that program and that program only. It would be the worst form of double counting to treat the rates recovered from LEC customers for their local exchange services (many of which are subsidized) as compensation for the individual transactions that they receive from CMRS providers. Hope did not tolerate double counting when it approved the decision of the FPC to exclude from the rate base items that had already been expensed by the regulated firm. "No greater injustice to consumers could be done than to allow items as operating expenses and at a later date include them in the rate base, thereby placing multiple charges upon the consumers." Hope, 320 U.S. 591, 599 (1944). By the same token, no greater injustice could done to the regulated firm than to leave it with costs that have to be taken into account—but always somewhere else.

Courts at every level have consistently conducted the "total effect" inquiry set out in Hope Natural Gas by analyzing whether the rate order itself yields a just and reasonable rate of return. See, e.g., Duquesne Light Co. v. Barasch, 488 U.S. 299 (1989); In re Permian Basin Area Rate Cases, 390 U.S. 747, 791-792 (1968); Colorado Interstate Gas Co. v. FPC, 324 U.S. 581, 603-604 (1945); Algonquin Gas Transmission Co. v. FERC, 948 F.2d 1305, 1315 (D.C. Cir. 1991); Trunkline LNG Co. v. FERC, 686 F.2d 430, 435 (6th Cir. 1982); Consolidated Gas Supply Corp. v. FERC, 653 F.2d 129, 133 (4th Cir. 1981); Giles Lowery Stockyards, Inc. v. Department of Agriculture, 565 F.2d 321, 324-325 (5th Cir. 1977), cert. denied, 436 U.S. 957 (1978)

There are a number of cases that, following Hope, have struck down specific rate orders of the Commission. One case that illustrates the basic pattern is AT & T v. FCC, 836 F.2d 1386 (D.C. Cir. 1988), which in the terms of the Per Curiam opinion "requires the carriers to refund earnings they receive in excess of the expected rate of return on capital factored into their rates." The Court had no difficulty at all in striking down the rate order.

> The refund rule requires the carrier to refund any earnings above the upper bound of target plus buffer, while the carrier may not recoup any shortfall in its earnings below the target. A carrier cannot be expected to receive earnings each year at precisely the prescribed rate of return, and from one two-year period to the next it must forfeit any excess in earnings while absorbing any deficiency. Thus, over the long run the carrier is virtually guaranteed to fall short of earning its required target rate of return on its combined operations for all such periods viewed together. The Commission itself acknowledged that the

refund rule introduces a "systematic bias" that operates to depress carrier earnings below their target "over the long run." Id. at 1390.

The FCC order was struck down on the ground that it could not meet the bottom line test of Hope, which was explicitly invoked for the proposition that the order could not stand because it necessarily pushed the rate of return below that allowable. Id. at 1391-1392. The FCC refund order set the average permissible rate of return equal to the top. Once that limitation was in place, the rate order made AT & T take the risk of all the bad years while its customers received the benefits of all the good years. Without the benefits from the good years, it became apparent that over the long run the average rate of return was below that necessary "to enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risk assumed," Hope 320 U.S. at 605, a standard that has been acknowledged and applied countless other times. See, e.g., United States v. FCC, 707 F.2d 610, 612 (D.C. Cir. 1983). AT & T held that it was not permissible to require an accurate accounting for the lean years while being subject to artificial restrictions on the permissible level of returns in the comparatively fat years.

The analogy to this case is immediate. Lean years are to CMRS originated transactions, as fat years are to LEC originated transactions. There are too many lean transactions and not enough fat ones for this proposed order to stand. Since it is known that the CMRS originated transactions are more frequent than the LEC originated transactions, the system here is also rigged so that the winning transactions will not balance out the losing transactions. As is the case with AT&T, no reviewing court has to conduct a detailed valuation of the various components that went into setting the rates.

It is possible to invalidate this order on the strength of indisputable economic theory that applies to a set of facts that are exhibited on the face of the record. So long as the rate order on its face requires the regulated industries to do business at a loss under its terms, then the order will be struck down as a violation of the takings clause.

The central teaching in AT & T, moreover, has not been undermined by the recent decision in MCI Telecommunications Corp. v. FCC, 59 F.3d 1407 (D.C. Cir. 1995). That decision qualified the earlier ruling in AT & T, but largely on the strength of the FCC's factual representations that there was no "unique balance" point in the rate structure, below which there is confiscation and above which there is supracompetitive returns. The affirmation of the FCC decision rested on the assumption that the inability of any LEC to earn the maximum allowed rate of return "does not necessarily mean that any LEC earned less than the minimum amount necessary to attract capital. . . ." Id. at 1412. On that specific factual assumption, the factual predicate of AT & T no longer holds. Once the maximum allowable rate was set above the balance point, it no longer is possible to tell from the face of the record that the LEC will not be able to attract sufficient capital to earn an appropriate rate of return on its regulated business. The basic legal proposition of AT & T, however, remained unchallenged: where the pricing system in question was certain to result in a loss on the specific services covered by the rate order, then the per se challenge on takings grounds is correct. Since the compensation provided the LECs under the Commission's NPRM is below that necessary to cover their costs, the AT & T decision still supplies the applicable rule for judgment

Looking more broadly, the two major propositions urged here are supported by other case authority. The first of these propositions concerns the obligation to provide just compensation for all interconnection orders, and is supported manifestly by the early case of Pacific Telephone Co. v. Eshleman, 166 Cal. 640, 137 P. 1119 (1913). The state railroad commission (which had jurisdiction over all public utilities) ordered Pacific Telephone to make interconnections to its long distance network to two local phone companies. After an exhaustive review of the subject, the Court concluded that the interconnection orders were a taking of Pacific Telephone's property, or what amounted to the same thing, a taking of the use of that property, for which compensation was required under the eminent domain power. Id. at 684-685.

The second proposition concerns the practical need to preserve the integrity of each individual ratemaking proceeding, which is illustrated by the early Supreme Court decision in Board of Public Utility Commissioners v. New York Telephone Co., 271 U.S. 23 (1926). In that rate proceeding, New York Telephone successfully challenged a rate order that required it to treat "excess depreciation" in earlier periods as part of the compensation that it received for its current operations. The Court first assumed that the Board's determination that excess depreciation had been allowed in earlier periods was correct. Id. at 30-31. But it then insisted that the Board could not reduce the amount of depreciation in the current period by a similar amount, where the effect of that reduction was to increase the reported income in the current period. The Court's basic position was that the telephone company, not its customers, owned the underlying assets:

> Past losses cannot be used to enhance the value of the property or to support a claim that the rates for the future are confiscatory. And the

law does not require the company to give up for the benefit of its future subscribers any part of its accumulations for past operations. Profits of the past cannot be used to sustain confiscatory rates for the future. Id. at 31-32.

The logic behind this position is impeccable. Each rate determination is a separate proceeding complete and entire unto itself. The principle is one of perfect neutrality, for it prevents the company from recouping past losses out of future revenues, just as it prevents the Public Utility Commission from using past profits as an offset against future gains. The advantage of this position is that it brings all rate hearings to a closure, and so long as the errors in question are unbiased, produces the appropriate levels of return over the long run. The same principles apply in this proceeding. The integrity of this bill and keep proceeding requires that its internal accounting be correctly done. The losses that are imposed in these transactions are not set off by some hypothetical gains, past or future, in some other regulated market.

B. The Investment-Backed Expectations Test of Penn Central Transportation Co. v. New York City is not Inconsistent with the Above Analysis.

Somewhat surprisingly, many of the submissions made on behalf of the proposed bill and keep order have relied on Penn Central Transportation v. New York City, 438 U.S. 104 (1978). The first point to note about this case is that it deals with landmark preservation statutes and not with any form of ratemaking for regulated industries. The decision in Hope, and indeed the entire line of ratemaking cases are nowhere discussed or cited in that

decision. Rather, the Court in sustaining the application of New York City's ordinance noted that

> the Court's decisions have identified several factors that have particular significance. The economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations are, of course, a relevant consideration. So, too, is the character of the governmental action. A "taking" may more readily be found when the interference with property can be characterized as a physical invasion by government

438 U.S. at 124.

The specific relationship of this test to the land use issues presented in the case is evident as well from the discussion that follows, where the court notes that under the police power, that is out of a concern for "the health, safety, morals, or general welfare, "this Court has upheld land-use regulations that destroyed or adversely affected recognized real property interests." Id. at 125. That statement in turn is consistent with the articulated legislative rationales for the landmark preservation statutes: the need to protect landmarks from being destroyed notwithstanding their "historic, cultural, or architectural significance to enhance the quality of life for all." Id. at 108. Those issues are a far cry from the questions of cost recovery that are the sole source of concern in this proceeding. There is, in a word, no set of police power interests that limit the protection of the property that the LECs invest in the development of their network.

In cases before the FCC, the dominant problem is to set the right rates of return for property. Even if the stated concerns of Penn Central are carried over to this context, they only throw the case back to the identical concerns that were raised by Hope. Initially, the economic impact of rate regulation is always heavy. Yet there is no question but that all investments of the regulated industry are made with explicit and distinct investment-backed expectations. These expectations are shaped by two factors. First, the rate regulation may be needed to counteract the monopoly power of the regulated party. Yet, by the same token, the takings clause guards against the risks of expropriation by the excessive use of government power. Jersey Central Power & Light Co. v. FERC, 810 F.2d 1168 (D.C. Cir. 1987). Those twin concerns have shaped all rate regulation in this entire area, so that it would be quite inconceivable to argue that a firm embarks on extensive investment in public work with the expectation that it will receive no compensation for its labors. In this instance the constitution shapes the nature of the expectations. Just as landowners are allowed to expect that they will normally receive compensation when the government physically enters their property, so too the long line of cases from Smyth v. Ames to the present has established that regulated firms are entitled to compensation for their investments in infrastructure and equipment. There is no tension between Penn Central and the Hope line of cases.

Conclusion. It seems clear, then, that the logic of Hope renders the bill and keep proposal invalid. Indeed, if anything, the logic for applying a bottom line test to this proceeding is more compelling than it was in Hope. "The primary aim of this legislation—The Natural Gas Act—was to protect consumers against exploitation at the hands of natural gas companies."

Hope, 320 U.S. at 610. That purpose may have made good sense when it was believed that the production and sale of natural gas in interstate markets was subject to monopoly forces. But this hearing differs in two vital ways from those in Hope. First, this proceeding does not directly implicate the interests of consumers at all, save insofar as all consumers as a class are benefited by the efficient set of interconnections between CMRS providers and LECs. Here, as in Eshleman, the need for the payment of just compensation is especially imperative. Whatever consumer interests are represented by CMRS providers (above and beyond the consumer interest represented by the LECs) are fully protected by able and sophisticated business entrepreneurs who are able to defend themselves equally in negotiations with the exchange carriers over mutual compensation arrangements or in any regulatory proceeding that respects, in full, the just compensation requirement.

Second, the cost of error in a Hope-like proceeding may have worked an injustice to this or that regulated firm, but it did not create any fundamental distortions in the overall operation of any given market. The entire natural gas industry was divided into local submarkets, so that it is doubtful that any error made in one proceeding did much to distort the relative prices between rival suppliers of natural gas. In this context, however, the misallocations of prices do not work for the direct benefit of consumers, but for the direct benefit of the CMRS providers. Any systematic error that denies LECs the appropriate cost recovery on their interconnections with CMRS providers commits the double whammy of forcing the LECs to subsidize their actual and potential competitors. Under these circumstances, any acceptable standard of decision should counsel the Commission against entering an order that forces the LECs to enter into a set of losing transactions without just compensation. That is doubly true when there is no necessity,

real or imagined, that requires this result. The parties have already negotiated interconnection agreements between themselves that work to their mutual benefit. Sections 251 and 252 of the Act call for them to enter into good faith negotiations on matters of this sort. The existing structure thus provides full protection for any and all legitimate interest of the CMRS providers. The proposed order for bill and keep represents bad economic policy. But more to the point of this paper, it also represents a clear and manifest violation of the just compensation clause to the Constitution, both as it is written, and as the Supreme Court has applied it to rate orders.